

(1-Oct-04)

1. A bivalent or multivalent antibody characterized by the following features:
 - (a) it is capable of suppressing an immune reaction;
 - (b) it is devoid of constant antibody regions; and
 - (c) it binds an epitope on the CD3 complex of the T-cell receptor.
2. The antibody of claim 1 that is a diabody.
3. The antibody of claim 1 that comprises two scFv antibodies linked by a peptide linker.
4. The antibody of claim 1 that is a single chain diabody.
5. The antibody according to any one of claims 1 to 4, wherein the variable V_H and V_L domains are connected via the peptide linker SAKTTP or SAKTTPKLGG.
6. The antibody according to any one of claims 1 to 5 wherein the variable domains correspond to the variable domains of the antibody produced by the hybridoma of ATCC deposit number CRL 8001.
7. The antibody according to claim 6, wherein a cysteine at position H100A (Kabat numbering system) has been exchanged for another amino acid.
8. The antibody according to claim 7, wherein the cysteine has been exchanged for a serine.
9. A polynucleotide, which encodes an antibody of any one of claims 1 to 8.

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10. An expression vector comprising the polynucleotide of claim 9.
11. The expression vector of claim 10, which is pSKK3-scFv₆-anti-CD3 (DSM 15137).
12. A host cell containing the expression vector of claim 10 or 11.
13. A pharmaceutical composition containing the antibody of any one of claims 1 to 8, the polynucleotide of claim 9 or the expression vector of claim 10 or 11.
14. Use of an antibody which is characterized by the following features:
 - (a) it is capable of suppressing an immune reaction;
 - (b) it is devoid of constant antibody regions; and
 - (c) it binds an epitope on the CD3 complex of the T-cell receptor; or the polynucleotide of claim 9 or the expression vector of claim 10 or 11 for the preparation of a pharmaceutical composition for immunotherapy.
15. Use according to claim 14, wherein the antibody is the antibody of any one of claims 1 to 8.
16. Use according to claim 14 or 15, wherein said immunotherapy is a therapy against acute transplant rejections.
17. Use of the polynucleotide of claim 9 or the expression vector of claim 10 or 11 for the preparation of a pharmaceutical composition for gene therapy.